

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of the Claims:

1-25. (Canceled)

1 26. (Currently Amended) A method of controlling traffic on a data network, said
2 traffic comprising payload data and associated signaling data, the method
3 comprising:

4 reading a portion of said payload data for a first traffic of a first
5 communications session between a first entity and a second entity communicating
6 over said data network;

7 ~~determining~~ using a signature in the portion of the payload data to determine
8 whether said portion of the payload data identifies ~~a traffic content type~~ peer-to-
9 peer (P2P) traffic;

10 storing signaling data associated with said portion of the payload data;

11 reading signaling data for a second traffic of a ~~further or resumed~~ second
12 communications session on said data network; ~~and~~

13 comparing said read signaling data with said stored signaling data to identify
14 said second traffic as ~~a further~~ the P2P traffic of said ~~controlled traffic content type~~;

15 and

16 controlling said ~~further or resumed~~ second communications session
17 responsive to said identification of the P2P traffic, by limiting propagation of the
18 P2P traffic without limiting propagation of non-P2P traffic.

1 27. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said controlling further comprises:

3 controlling a route of said ~~further or resumed~~ second communications session
4 traffic.

1 28. (Currently Amended) ~~A method as claimed in~~ The method of claim 26, further
2 comprising:

3 ~~wherein said reading of signaling data for the second traffic includes~~
4 reading at least a portion of said signaling data for said second traffic;
5 ~~wherein said method includes~~
6 determining from said signaling data an address of an originator of said
7 ~~further or resumed~~ second communications session, said originator comprising one
8 of said first and second entities;[[,]] and ~~wherein said method comprises~~
9 sending a signal to said originator using said determined address.

1 29. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said controlling further comprises:

3 signaling with said signaling data.

1 30. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said controlling further comprises:

3 sending a message in said payload data.

1 31. (Currently Amended) ~~A method as claimed in~~ The method of claim 30,
2 wherein said message includes a request to retry establishing said ~~further or~~
3 ~~resumed~~ second communications session.

1 32. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said storing is responsive to said determining.

1 33. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said reading of the portion of said payload data for the first traffic further
3 comprises:

4 reading first payload data for a communication from said first to said second
5 entity and second payload data for a communication from said second to said first
6 entity, and wherein said determining whether said portion of payload data
7 ~~identifies a controlled traffic content type~~ the P2P traffic; and

8 determines whether both said first and said second payload data ~~are of said~~
9 ~~controlled traffic content type~~ contain the P2P traffic.

1 34. (Currently Amended) ~~A method as claimed in~~ The method of claim 33, further
2 comprising
3 buffering said first and second payload data for said determining.

35. (Canceled).

1 36. (Currently Amended) ~~A method as claimed in~~ The method of claim 26, further
2 comprising:
3 signaling, responsive to said determining, to at least one of said first and
4 second entities to interrupt said communications session.

1 37. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said second traffic comprises an attempt to begin a further communications
3 session of ~~said controlled traffic content type~~ the P2P traffic or to resume said
4 communications session, and wherein said controlling further comprises:
5 controlling traffic of said ~~further or resumed~~ second communications session.

1 38. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said network comprises a packet data network and wherein said signaling
3 data includes a destination identifier.

1 39. (Currently Amended) ~~A method as claimed in~~ The method of claim 38,
2 wherein said network comprises an internet protocol (IP) network, ~~in particular a~~
3 ~~transmission control protocol (TCP) IP network,~~ and wherein said signaling data
4 includes a destination address and port number.

1 40. (Currently Amended) ~~A method as claimed in~~ The method of claim 26,
2 wherein said traffic content type to be controlled includes ~~peer-to-peer~~ P2P protocol
3 network traffic employing a variable TCP port number for ~~peer-to-peer~~ P2P
4 connections.

1 41. (Currently Amended) ~~A method as claimed in~~ The method of claim 40,
2 wherein said controlling further comprises:
3 routing said ~~peer-to-peer~~ P2P traffic to a ~~peer-to-peer~~ P2P network gateway.

1 42. (Currently Amended) ~~A method as claimed in~~ The method of claim 40,
2 wherein said controlling further comprises:
3 routing said ~~peer-to-peer~~ P2P traffic to a ~~peer-to-peer~~ P2P network cache.

43-44. (Canceled)

1 45. (Currently Amended) A router for controlling traffic on a data network, said
2 traffic comprising payload data and associated signaling data, the router
3 comprising:

4 a network interface ~~for interfacing that~~ interfaces with said data network;

5 a packet switch coupled to the network interface that separates the traffic
6 into peer-to-peer (P2P) traffic and non P2P traffic, wherein propagation of the P2P
7 traffic is limited without limiting propagation of the non P2P traffic;

8 a data memory ~~operable to store that~~ stores data to be processed;

9 an instruction memory ~~storing that~~ stores computer executable code; and

10 a processor coupled to said network interface, to said data memory, and to
11 said instruction memory ~~and operable to process that~~ processes said data in
12 accordance with the computer-executable code stored in said instruction memory,
13 whereby said processor is configured to:

14 read a portion of said payload data for a first traffic of a communications
15 session between a first entity and a second entity communicating over said network;

16 using a signature in the portion of the payload data to determine whether
17 said portion of payload data identifies a ~~the P2P traffic content type to be controlled;~~

18 store signaling data associated with said portion of payload data;

19 read signaling data for a second traffic on said network; ~~and to~~

20 compare said read signaling data with said stored signaling data to identify
21 an attempt to begin a ~~further~~-second communications session of said ~~controlled~~-P2P
22 traffic type ~~or to resume said communications session~~; and
23 control said ~~further or resumed~~-second communications session responsive to
24 said identification.

1 46. (Currently Amended) ~~A router as claimed in~~The router of claim 45, wherein
2 network comprises a packet data network, wherein said signaling data comprises a
3 destination identifier to identify a destination of a packet of data comprising said
4 first traffic, and wherein said storing stores a destination identifier for said first
5 traffic ~~of said controlled traffic content type~~ that is the P2P traffic in said data
6 memory responsive to identifying said ~~controlled~~-P2P traffic ~~content type~~.

1 47. (Currently Amended) ~~A router as claimed in~~The router of claim 46, wherein
2 said processor is further configured to:
3 store portions of said payload data of said communications session sent from
4 both said first and said second entity; and
5 determine when communications from both said first and second entities are
6 ~~of a said controlled~~ the P2P traffic ~~content type~~.

48-52. (Canceled).